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(54) **DUAL RING TIRE INFLATOR WITH
SPLITTABLE SUPPORT PLATE**

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(58) Field of Search **157/1, 1.1, 1.11,
157/1.17, 1.2, 1.21, 14-21; 141/38; 29/894.31**

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(57) **ABSTRACT**

An apparatus for inflating a tire mounted on a rim can include a conveyor for transporting a tire mounted on a rim to a predetermined position at a tire inflating work station. The conveyor can include carrier surfaces spaced laterally with respect to one another along a path of travel for engaging the tire and rim for transport. The carrier surfaces are moveable along the path of travel and moveable vertically between a raised transport position and a lowered transfer position. A support surface at the tire inflating workstation has at least two portions. The portions include at least one interlocking joint for holding the portions of the support surface in sealing engagement with respect to one another during an inflation process. An apparatus for inflating a tire mounted on a rim can include a reciprocal inflation head moveable from a first position spaced from the tire to a second position engagable with the side wall of the tire for communicating pressurized fluid to inflate the tire on the rim. At least two concentric seals are selectively moveable with respect to one another to bring at least one seal into sealing engagement with a side wall of the tire to be inflated. A mechanism for moving at least one seal with respect to the other seal is provided for selectively presenting one seal in operable position for engaging a side wall of the tire to be inflated.

30 Claims, 8 Drawing Sheets

